Morone saxatilis (Striped Bass)

Report Date: January 13, 2016

Priority 2 Species of Greatest Conservation Need (SGCN)

Class: Actinopterygii (Ray-finned Fishes)
Order: Perciformes (Perch-like Fishes)
Family: Moronidae (Temperate Basses)

General comments: none

No Species Conservation Range Maps Available for Striped Bass

SGCN Priority Ranking - Designation Criteria:

Risk of Extirpation: NA

State Special Concern or NMFS Species of Concern: NA

Recent Significant Declines:

Striped Bass is currently undergoing steep population declines, which has already led to, or if unchecked is likely to lead to, local extinction and/or range contraction.

Notes:

ASMFC Stock Assessment

Regional Endemic: NA

High Regional Conservation Priority:

Committee on the Status of Endangered Wildlife in Canada (COSEWIC):

Status: E, Last Examination: 11/1/2012, Change: In a higher risk category, Canada Occurence: NB, NS, Atlantic Ocean

Atlantic States Marine Fisheries Commission Stock Assessments:

Status: Unstable/Increasing, Status Comment: In 2012, the Atlantic striped bass stock was not overfished or experiencing overfishing based on the points estimates of fully-recruited fishing mortality and female spawning stock biomass relative to the reference points defined in this assessment.

Reference: Atlantic States Marine Fisheries Commission. 2013. ASMFC Striped Bass Technical Committee. 2013 Update of the Striped Bass Stock Assessment using Final 2012 Data. Available from: http://www.asmfc.org/fisheries-science/stock-assessments/

High Climate Change Vulnerability: NA

Understudied rare taxa: NA

Historical: NA

Culturally Significant:

Species identified as both biologically vulnerable and culturally significant by Maine's tribes.

Habitats Assigned to Striped Bass:

Formation Name Freshwater Aquatic

Macrogroup Name Rivers and Streams

Habitat System Name: Large River **Primary Habitat** Notes: adult spawning, juvenile
Habitat System Name: Medium River **Primary Habitat** Notes: migratory corridor

Formation Name Intertidal

Macrogroup Name Intertidal Water Column

Habitat System Name: Confined Channel **Primary Habitat** Notes: migratory corridor

Habitat System Name: Embayment Notes: migratory route

Formation Name Subtidal

Macrogroup Name Subtidal Pelagic (Water Column)

Habitat System Name: Confined Channel **Primary Habitat** Notes: migratory corridor
Habitat System Name: Nearshore Notes: assumed feeding habitat and migratory corridor

Morone saxatilis (Striped Bass)

Report Date: January 13, 2016

Priority 2 Species of Greatest Conservation Need (SGCN)

Class: Actinopterygii (Ray-finned Fishes)
Order: Perciformes (Perch-like Fishes)
Family: Moronidae (Temperate Basses)

Formation Name Subtidal

Habitat System Name: Offshore Notes: assumed feeding habitat and migratory corridor

Stressors Assigned to Striped Bass:

Stressor Priority Level based on Severity and Actionability

	Moderate Severity	High Severity
Highly Actionable	Medium-High	High
Moderately Actionable	Medium	Medium-High
Actionable with Difficulty	Low	Low

IUCN Level 1 Threat Biological Resource Use

IUCN Level 2 Threat: Fishing and Harvesting of Aquatic Resources

Severity: Moderate Severity Actionability: Moderately actionable

Notes: Extraction rates may be low in some cases but mortality rates are high in some populations. Regulations can be

implemented to close fisheries and effect is measurable within 2-3 generations of the population, but may be

difficult to implement.

IUCN Level 1 Threat Energy Production and Mining

IUCN Level 2 Threat: Renewable Energy

Severity: Moderate Severity **Actionability:** Moderately actionable

Notes: Some proposed renewable energy projects such as tidal barrages or tide driven turbines may significantly impact

anadromous species by either obstructing or greatly reducing natural migration routes, as well as mortality

assocated with turbine strikes.

IUCN Level 1 Threat Human Intrusions and Disturbance

IUCN Level 2 Threat: Recreational Activities

Severity: Moderate Severity Actionability: Moderately actionable

Notes: Extraction rates may be low in some cases but mortality rates are high in some populations. Regulations can be

implemented to close fisheries and effect is measurable within 2-3 generations of the population, but may be

difficult to implement.

IUCN Level 1 Threat Natural Systems Modifications

IUCN Level 2 Threat: Dams and Water Management-Use

Severity: Moderate Severity **Actionability:** Moderately actionable

Notes: Some head of tide dams remain in Maine and limit or obstruct access to habitat. Dam removals on the Kennebec

and Penobscot have already occurred and opened access to historical habitat, but the long-term effects of

reduced habitat could be difficult to recover from.

IUCN Level 1 Threat Pollution

IUCN Level 2 Threat: Domestic and Urban Waste Water

Severity: Moderate Severity **Actionability:** Moderately actionable

Notes: The specific causes of impact are increased non-point source pollution (heavy metals and nutrient inputs),

increased turbidity, and lower dissolved oxygen. Liklihood is high and increasing (high certainty), current spatial extent is Southern Maine, but expanding along coast, so actionability is moderate, i.e. the threat can be

minimized in newly developing areas.

Morone saxatilis (Striped Bass)

Priority 2 Species of Greatest Conservation Need (SGCN)

Class: Actinopterygii (Ray-finned Fishes)
Order: Perciformes (Perch-like Fishes)
Family: Moronidae (Temperate Basses)

IUCN Level 1 Threat Climate Change and Severe Weather

IUCN Level 2 Threat: Habitat Shifting or Alteration

Severity: Moderate Severity **Actionability:** Actionable with difficulty

Notes: Climate change could reduce or relocate spawning, rearing, and overwintering habitat and shift species natural

range. Liklihood of adjusting to accommodate is low. Abundance and assemblages of prey species will likely be

Report Date: January 13, 2016

altered.

IUCN Level 2 Threat: Temperature Extremes

Severity: Moderate Severity **Actionability:** Actionable with difficulty **Notes:** Range shifts with changing sea surface temperatures may already be occuring.

IUCN Level 1 Threat Invasive and Other Problematic Species, Genes and Diseases

IUCN Level 2 Threat: Invasive Non-native-Alien Species-Diseases

Severity: Moderate Severity Actionability: Actionable with difficulty

Notes: Effect of invasives largely unknown but might have effect on specific populations (Kennebec). The ability,

likelihood, and certainty to mitigate invasives is low.

IUCN Level 1 Threat Pollution

IUCN Level 2 Threat: Industrial and Military Effluents

Severity: Moderate Severity Actionability: Actionable with difficulty

Notes: Non-point source pollution (heavy metals and nutrient inputs) has been directly related to declining runs.

Liklihood is high and increasing (high certainty), current spatial extent is a few locations, , actionability is low

because further regulation of effluents is not likely within next 10 years in Maine.

Species Level Conservation Actions Assigned to Striped Bass:

None. Only species specific conservation actions that address high (red) or medium-high (orange) priority stressors are summarized here.

Guild Level Conservation Actions:

This Species is currently not attributed to a guild.

Broad Taxonomic Group Conservation Actions:

Relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-1.

Habitat Based Conservation Actions:

Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-15. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.